

agement. However, the quality of life and physical condition of dialysis patients remains compromised.

Objective.– To evaluate the effects of physical adapted activity based on flexibility, strength and endurance exercises program.

Methods.– A group of 30 hemodialysis patients followed from the department of nephrology and hemodialysis following a physical activity program during 3 months, 2 times a week. The evaluation is performed before and after the proposed protocol by: quality of life (SF36), anxiety and depressive symptoms (HAD), lipid and test six-minute walk (T6MM).

Results.– There was no undesirable event during rehabilitation sessions. Quality of life (physical and mental component) and anxious component HAD improved significantly. Distance walked on the 6MWT increased by 16.5%. Lipid profile is also improved (HDL and LDL – cholesterol, triglyceride).

Discussion/conclusion.– Prescribing of adapted physical activity is highly recommended for the population of hemodialysis patients and appears to be a safe and effective alternative to develop functional capacity, quality of life and the psychological profile of hemodialysis patients.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1014>

P268-e

Ankle osteoarthritis: Effectiveness of hyaluronic intra-articular injections with mesotherapy

A. Neves^{*}, J. Dias, A. Cruz, M. Silva, M. Mendonça, I. Ramires

Centro Hospitalar Lisboa Central, Hospital São José, Lisbon, Portugal

^{*}Corresponding author.

Keywords: Ankle osteoarthritis; Hyaluronic acid injections; Mesotherapy

Background.– Ankle osteoarthritis (AOA) produces chronic disability that directly impacts QoL. There is limited published literature relating to use of hyaluronic acid (HA) in ankle and pain relief.

Objective.– This might be the first study to access effectiveness of HA intra-articular administration and mesotherapy for treatment of AOA pain.

Methods.– Medical files over a period of 54 months of a cohort of 25 patients with AOA were reviewed. Treatment consisted of intra-articular injection of 2 cm³ of HA between talus and tibia and intradermal injections of lidocaine, piroxicam and thiocolchicoside, 10 cm³ in total. Main outcome was patient's Pain Rating scale (PRS) before and after treatment.

Results.– Twenty-five patients included (21 females), mean age 65.5 years (± 13.57), aged 36 to 87-years-old. Ten patients treated bilaterally, 7 right side treated. Total number of treatment sessions ranged from 1 to 9 (mean 3.08). Median values of PRS results before and after treatment were 9.5 (min. 6, max.10) and 4.5 (min. 0, max. 10) respectively, with a significant improvement ($P < 0.001$). Analgesic effect lasted from 2 weeks until 6 months. There were no adverse effects.

Discussion.– The HA intra-articular injection associated to mesotherapy can reduce significantly pain in AOA. Further studies are needed to confirm its benefit.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1015>

P269-e

Long-distance runners injuries: Treatment based on anatomobiomechanical issues

A. Zão^{*}, P. Barros

Centro Hospitalar do Porto, Porto, Portugal

^{*}Corresponding author.

Keywords: Runners; Injuries; Anatomy; Biomechanical; Tibial stress fractures; Medial tibial stress syndrome

Background.– Running is often recommended to preserve a healthy lifestyle. However, injuries among long-distance runners are common and increase significantly when weekly mileage exceeds 40 miles. The development of running diagnostic tests and the improved knowledge about anatomobiomechanical

treatment.

Objective.– The aim of this study is to evaluate the anatomy and biomechanics of the main long-distance runners injuries and to correlate it with treatment options. **Methods.**– Review of the literature published until October 2013 in MEDLINE, Cochrane Library, EMBASE and Scopus databases.

Results.– Tibial stress fractures and medial tibial stress syndrome can often be prevented and treated by correcting biomechanical abnormalities. By the other side, popliteal artery entrapment syndrome and exertional compartment syndrome are caused by anatomic abnormalities and surgical intervention is commonly necessary.

Discussion.– Leg pain related to bone, muscles, tendons and vascular disorders is common among long-distance runners. While no clear evidence exists that these injuries can be prevented, most can be treated successfully by considering underlying anatomical and biomechanical causes.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1016>

P270-e

Sports injuries in childhood – from the perspective of pediatric rehabilitation

I. Petronic^{a,*}, D. Cirovic^a, D. Nikolic^b, T. Knezevic^b, D. Dzamic^b

^a Faculty of Medicine, University of Belgrade, Belgrade, Serbia

^b Physical Medicine and Rehabilitation Department, University Childrens Hospital, Belgrade, Serbia

^{*}Corresponding author.

Keywords: Sports; Injuries; Children

Background.– Sports activities in children age are advised and planned with respect to the age and gender, the use of protective measures and children's health status follow-up.

Objective.– To determine the most frequent types of sports injuries, implementation of treatment program in the acute phase and recommendations for the treatment in later phases after the injuries.

Methods.– We evaluated at University Childrens Hospital, children age between 7–18 years that are actively participating in different sport activities. Children were grouped into different groups regarding the type of sport activities and injuries. The treatment was composed of different physical agents and rehabilitation techniques.

Results.– Different sports have characteristic type of injuries of skeletal-muscular and neurovascular systems. The most frequently diagnosed injuries are: joint distortions, fractures in the epiphysis bone growth areas, subluxations and tendinitis.

Discussion.– For recommendation of sport activity type and injuries prevention, it is necessary to know the anatomical and physiological changes during the childhood. Optimal and adequate treatment is mandatory in order to achieve complete and prompt recovery and enable timely return to sport activities. Therefore, it is important to underline, the necessity of multidisciplinary approach particularly including parents and coaches.

<http://dx.doi.org/10.1016/j.rehab.2014.03.1017>

P271-e

Results of arthroscopic treatment of anterolateral soft tissue impingement of the ankle in athletes: A series of 22 cases

H. El Hyaoui^a, T. Toua^a, N. El Koumiti^a, B. Moustamsik^a, A. Messoudi^a, J. Hassoun^a, M. Arssi^a, A. Garch^a, K. Belhaj^b, E.H. Kassimi^b, F. Lmidmani^b, A. Elfatimi^b

^a Service de traumatologie-orthopédie, Pavillon 32, CHU Ibn Rochd, Casablanca, Morocco

^b Service de médecine physique et de réadaptation, CHU Ibn Rochd, Casablanca, Morocco

Keywords: Ankle; Soft tissue impingement; Arthroscopy; Athlete